

Amendments to the Claims

1. (currently amended) A method for performing beating-heart closed-chest surgery on a patient to connect a graft vessel to at least one target vessels vessel, comprising:

creating at least one point of entry into the thoracic cavity;

~~performing a sutureless proximal anastomosis between the graft vessel and one target vessel while the heart is beating, utilizing a tool inserted through at least one point of entry;~~

gaining access to a distal anastomotic site; and

inserting a tool through at least one point of entry, said tool including an anvil;

inserting said anvil through the wall of a target vessel into the lumen of the target vessel; and

performing a ~~sutureless~~ distal anastomosis between an end of the graft vessel and ~~another the side of the~~ target vessel with ~~at least one~~ said tool while the heart is beating, ~~wherein each said tool enters the thoracic cavity through at least one point of entry.~~

2. (currently amended) The method of claim 1, wherein said performing a ~~sutureless~~ distal anastomosis comprises:

attaching the graft vessel to the target vessel; and

creating an opening in the target vessel.

3. (currently amended) The method of claim 1 ~~2~~, wherein said attaching comprises stapling the graft vessel to the target vessel.

Amendments to the Claims

1. (currently amended) A method for performing beating-heart closed-chest surgery on a patient to connect a graft vessel to at least one target vessels vessel, comprising:

creating at least one point of entry into the thoracic cavity;

~~performing a sutureless proximal anastomosis between the graft vessel and one target vessel while the heart is beating, utilizing a tool inserted through at least one point of entry;~~

gaining access to a distal anastomotic site; and

inserting a tool through at least one point of entry, said tool including an anvil;

inserting said anvil through the wall of a target vessel into the lumen of the target vessel; and

performing a ~~sutureless~~ distal anastomosis between an end of the graft vessel and ~~another~~ the side of the target vessel with at least one said tool while the heart is beating, ~~wherein each said tool enters the thoracic cavity through at least one point of entry.~~

2. (currently amended) The method of claim 1, wherein said performing a ~~sutureless~~ distal anastomosis comprises:

attaching the graft vessel to the target vessel; and

creating an opening in the target vessel.

3. (previously amended) The method of claim 1, wherein said attaching comprises stapling the graft vessel to the target vessel.

4. (cancelled)

5. (currently amended) The method of claim 4 1, further comprising moving said anvil against the wall of the target vessel.

6. (currently amended) The method of claim ~~4~~ 45, wherein said performing a ~~sutureless~~ proximal anastomosis comprises:

placing an end of a tool substantially normal to the target vessel, said tool holding the graft vessel; and

deploying an anastomosis device to attach the graft vessel to the target vessel.

7. (original) The method of claim 6, further comprising splitting said tool to release the graft vessel.

8. (original) The method of claim 1, wherein said creating comprises utilizing a sub-xyphoid approach.

9. (withdrawn)

10. (currently amended) The method of claim ~~4~~ 45, further comprising measuring the distance between the proximal anastomosis site and the distal anastomotic site with a vein measuring device inserted through at least one point of entry into the thoracic cavity.

11. (previously amended) The method of claim 1, further comprising deploying a trocar port in at least one point of entry into the thoracic cavity.

12. (original) The method of claim 1, wherein said gaining access comprises creating an opening in the pericardium, wherein the opening extends substantially from the aorta to the apex of the heart.

13. (original) The method of claim 1, wherein said gaining access comprises accessing the intrapericardial space.

14. (currently amended) The method of claim 1, wherein said performing a sutureless distal anastomosis further comprises attaching a clamp assembly to the distal end of the graft vessel.

15. (original) The method of claim 14, further comprising slicing the distal end of the graft vessel.

16. (original) The method of claim 14, further comprising connecting the clamp assembly to a distal anastomotic tool.

17. (currently amended) The method of claim 1, further comprising viewing the anastomosis sites during the procedure.

18. (currently amended) The method of claim 1, further comprising performing ~~at least one additional sutureless proximal anastomosis and~~ at least one additional sutureless distal anastomosis.

Claims 19-44. (withdrawn).

45. (new) The method of claim 1, further comprising performing a ~~sutureless~~ proximal anastomosis between the graft vessel and ~~one~~ another target vessel while the heart is beating, utilizing a tool inserted through at least one point of entry.

46. (new) The method of claim 45, wherein said proximal anastomosis is sutureless.

47. (new) The method of claim 1, wherein said distal anastomosis is sutureless.